

2004 Water Quality Report

Saint Paul Regional Water Services

Valuable Information About SPRWS

Informacion importante. Si no la entiende, haga que alguien se la traduzca ahora.

Nov yog ntaub ntawv ceeb. Yog koy tsi to taub, nrhiav neeg pab txhais rau koh kom sai sai.

To request additional copies of this report, please contact Customer Service at 651-266-6350.

To participate in decisions that may affect the quality of the water supplied by SPRWS, the public may attend the Board of Water Commissioners meetings held at 5:00 p.m. the second Tuesday of each month at the Saint Paul City Hall.

SPRWS

Customer Service

651-266-6350

SPRWS Water Quality

651-266-1635

EPA Safe Drinking

Water Hotline

800-426-4791

**Minnesota Department
of Health**

651-215-5800

Email:

waterinquiries@ci.stpaul.mn.us

Website:

www.ci.stpaul.mn.us/water

Public Information:

Jodi L. Wallin 651-266-6308

We take pride in providing you with quality drinking water at a reasonable cost. Every day, SPRWS produces an average of 50 million gallons of drinking water and distributes it through a thousand miles of water main to more than 415,000 residents of Saint Paul and the surrounding communities.



Saint Paul Regional
Water Services
8 4th Street E. Suite 200
Saint Paul, MN 55101

A season of change brings growth and expansion



Lake Vadnais, the last lake our water travels through before McCarron's Treatment Plant.

At Saint Paul Regional Waters Services, we've weathered the changing of the seasons for more than a century. We've grown and

expanded over the years, changing to meet the needs of our customers.

Some years, change is barely perceptible. We might install a new filter bed to clean the water or



McCarron's prepares for construction last fall.



Highland Park Water Tower, built in 1928, still supplies drinking water to our customers.

implement a new way of testing for contaminants. Other years, changes are more noticeable. This year, major changes are underway.

Look inside for more.

SPRWS changes to meet the future



A new public entrance to the McCarron's Treatment Plant was completed in the fall of 2003.

Moving to a new home

Before the end of 2004, we will relocate most of our facilities on one campus at the McCarron's Water Treatment Plant site. Our downtown Saint Paul and Hamline Avenue operations will join our plant facilities in Maplewood. The only separate facility remaining will house a small number of SPRWS staff currently located at the Vadnais Lake site.

The consolidation of utility operations at the plant site will help enhance efficiency, promote easier communication between employees, facilitate workflow, and improve other operational needs. Also, by occupying buildings we own, SPRWS will no longer need to pay for leased space elsewhere.

Doing business in person

The most immediate and obvious change will be for our customers who prefer to transact

business with us in person. Although we will continue to offer a bill payment station in downtown Saint Paul, our main customer service, cashiering, and permit operations will be located at the new campus—where we will offer ample free parking.

Please watch for more details about a downtown bill payment location, as well as other additional information about our move, in the summer issue of *Customer Service Connections*, which will be distributed with your bills July through September.

In addition to the new buildings on the campus site, we will continue to make improvements to our existing treatment plant buildings, including security updates.

Improving taste & odor

While we work on improving our workspace, we continue with our endeavors to constantly improve the quality of the water for our customers. One of those water quality projects is the planned upgrade of our filters at the plant.

We recognize the importance of producing water that is free from off-tastes or odors. For the past 20 years, we have focused our efforts on our watershed areas. From the Mississippi River through Vadnais Lake, we have worked hard to improve the quality of our source water. We reduced the amount of

nutrients in the lake reservoir system by placing four aerators in two of our lakes, restoring four wetlands, and installing a ferric chloride feed system. We also established a flavor profile panel, which assesses our water quality on a weekly basis to assist us with our treatment process. Next, we plan to focus on our treated water by installing granular activated carbon (GAC) filters. Due to its adsorptive capacity, GAC is highly effective at removing taste and odor compounds. We anticipate these new filters will be operational by the spring of 2006.

Preserving wetlands

In 2003, the Board of Water Commissioners sold three parcels of land to Anoka County, preserving more than 600 acres of wetland and wildlife area along Rice Creek, extending the boundaries of an existing 2,500-acre park reserve to make it one of the largest protected reserves in the metro area.



Rice Creek as it flows through wetlands.

Hiring a new general manager

We also welcomed new general manager Steve Schneider. An engineer with SPRWS since 1990, Steve brings with him new ideas while maintaining the utility's long-standing dedication to producing high quality drinking water.



Steve Schneider was named general manager of the utility on Dec. 17, 2003.



The architect's rendering of the new office building at 1900 Rice St. N., Maplewood, Minn.

Important information from the EPA



Jim Dustin, laboratory technician, looks over water samples in the lab at McCarron's Treatment Plant.

Testing your drinking water

According to the Environmental Protection Agency (EPA), drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants.

The presence of contaminants does not necessarily indicate that water poses a health risk.

The EPA imposes regulations that limit the amount of certain contaminants in water provided by public water systems to ensure that tap water is safe to drink. Food and Drug Administration regulations establish limits for contaminants in bottled water that must provide the same protection for public health.

More information about contaminants and potential health effects can be obtained by calling the EPA's Safe Drinking Water Hotline at 800-426-4791.

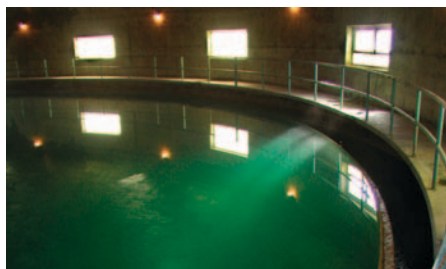
By law, SPRWS must take corrective action and notify our customers immediately if it is ever in non-compliance with federal or

state drinking water standards. We continue to comply with all regulations. For test results or questions about SPRWS drinking water, call our lab at 651-266-1635.

Knowing your water sources

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of people and animals. Your water is regularly tested for the following contaminants:

- Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural operations, and wildlife.
- Inorganic contaminants, such as salts and metals, which can be naturally occurring or result from urban storm water runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.



One of the clarifiers at the McCarron's Treatment Plant.

• Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban storm water runoff, and residential uses.

• Organic chemical contaminants, including synthetic and volatile organic chemicals, are by-products of industrial processes and petroleum production; they can also come from gas stations, urban

Concerning lead levels

Please note that infants and young children tend to be more vulnerable to lead in drinking water than the general population. The lead levels in the SPRWS water system continue to be in compliance with drinking water standards and we continue to monitor these levels carefully. However, it is possible that lead levels in your home might be higher than at other homes in the community as a result of materials used in your home's plumbing. If you are concerned about lead levels in your water, run your tap for 30 seconds to 2 minutes before using the water. Or, you may wish to have your water tested. For additional information, call the Safe Drinking Water Hotline at 800-426-4791.

storm water runoff, and septic systems.

• Radioactive contaminants, which can be naturally occurring or be the result of oil and gas production and mining activities.

Seeking advice in special cases

Some people may be more vulnerable to contaminants found in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. Environmental Protection Agency/Centers for Disease Control guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* are available from the Safe Drinking Water Hotline (800-426-4791).



Mississippi River near Fridley.

Where our water comes from

We draw a large percentage of our water from the Mississippi River which travels through a chain of lakes, including Deep, Charles, Pleasant, Sucker, and Vadnais before reaching our treatment plant. Groundwater from four deep wells, ranging from 438 to 463 feet in depth, that tap into the Prairie du Chien-Jordan aquifer, provides a small percentage of our

water supply. An assessment of our water sources indicates that, while susceptible to contamination, SPRWS has consistently and effectively treated our source water to meet drinking water standards. For a copy of the source water assessment, call the Minnesota Department of Health: 651-215-0800 or 800-818-9318 (press #5).

Substances detected in SPRWS water in 2003

Regulated substances controlled prior to distribution

Substance (units)	Highest Level Allowed (MCL)	Highest Level Detected	Range Detected	Average Level**	Recommended Maximum (MCLG)	Typical Source
Combined Radium (pCi/l) (12/12/02)*	5	—	n/a	0.18	0	Natural deposits
Total Coliform bacteria	Present in < 5% of monthly samples	1.0%	0.0–1.0%	1%	0	Naturally present in environment
Nitrate as nitrogen (ppm)	10	0.55	n/a	0.55	10	Fertilizer, sewage, natural deposits
Trihalomethanes (Total TTHM) (ppb)	80	48.9	25.2-48.9	40.39	n/a	Disinfection by-product
Haloacetic acids (ppb)	60	32.8	12.2-32.8	31.95	n/a	Disinfection by-product
Styrene (ppb)	100	2.2	0-2.2	0.19	100	Rubber & plastic from factories; landfill leaching
Fluoride (ppm)	4.0	1.3	1.0-1.3	1.18	4.0	Dental health additive
Substance (units)	Maximum Residual Disinfectant Level Goal	Maximum Residual Disinfectant Level	Highest/Lowest Monthly Average	Highest Quarterly Average	Typical Source	
Chlorine (ppm)	4.0	4.0	2.68/3.24	3.15	Microbe control additive	

Regulated substances controlled at the customer's tap

Substance (units)	Action Level (AL) (90% of samples must be under this level)	# of sites over AL	90% of samples were below this level	Typical Source
Lead (ppb)	15.0	4 out of 50	11.2	Home plumbing
Copper (ppm)	1.3	0 out of 50	0.06	Home plumbing

Turbidity

Highest Level Allowed	Lowest Monthly % Samples meeting the limits	Highest single measurement	Average Level	Typical Source
TT	100 %	0.19 NTU	0.048	Soil runoff

Unregulated substances

Substance (units)	Average Level Detected	Recommended Maximum or HRL	Typical Source
Sodium (ppm) (3/25/99)*	11.0	200	Natural deposits
Sulfate (ppm) (3/25/99)*	21.0	250	Natural deposits

Unregulated substances pending regulation

Substance (units)	Range detected	Average Result	Typical Source
Radon (pCi/l)(2002)*	n/a	7.5	Natural deposits

* Some contaminants are sampled less frequently than once a year; as a result, not all contaminants were sampled for 2003. If any of these contaminants were detected the last time they were sampled, they are included in the table along with the date the detection occurred.

**This is the value used to determine compliance with federal standards. It sometimes is the highest value detected and sometimes is an average of all the detected values. If it is an average, it may contain sampling results from the previous year.

MCLG: Maximum Contaminant Level Goal. The concentration of a contaminant in drinking water below which there is no known or expected risk to health. **MCLGs** allow for a margin of safety. **MCL:** Maximum Contaminant Level. The highest level allowed in drinking water. **MCLs** are set as close to the **MCLGs** as feasible using the best available treatment technology. **AL:** Action Level. The concentration of a contaminant which, if exceeded, triggers treatment methods or other requirements that the utility must follow. **PPB:** parts per billion. **PPM:** parts per million. **PCi/l:** PicoCuries per liter (a measure of radioactivity). **ND:** not detected at testing limits. NTU: nephelometric turbidity unit. Turbidity is a measure of the clarity of the water. We monitor it because it is a good indicator of the effectiveness of our filtration system. The percentage of Total Organic Carbon (TOC) removal was measured each month and the system met all TOC removal requirements set by the US EPA. **TT:** treatment technique. The EPA has two requirements: 1) that the maximum level found must be less than 1 NTU, and 2) that the level must be under 0.3 NTU 95% of the time. **SPRWS** met both requirements. **HRL:** Health Risk Limit. **N/A:** Not applicable (Does not apply).

What you need to know about radon

Radon is a radioactive gas, which is naturally occurring in some groundwater. It poses a lung cancer risk when gas is released from water into air (as occurs during showering, bathing, or washing dishes or clothes) and a stomach cancer risk when it is ingested. Because radon in

indoor air poses a much greater health risk than radon in drinking water, an Alternative Maximum Contaminant Level (AMCL) of 4,000 picoCuries per liter (pCi/l) may apply in states that have adopted an Indoor Air Program, which compels citizens, homeowners, schools, and communities to

reduce the radon threat from indoor air. For states without such a program, the Maximum Contaminant Level (MCL) of 300 pCi/l may apply. Minnesota plans to adopt an Indoor Air Program once the Radon Rule is finalized.